

## Review Article

### Covid 19: An Experience Sharing to health and treatment diagnosis

#### **Abstract:**

SARS CoV 2, a Viral Disease otherwise known as Covid 19, discovered in the year 2019. It originated in Wuhan, Hubei Province in China. It became the 5<sup>th</sup> documented Pandemic after the Spanish Flu in 1918. The symptoms are typical of Influenza like Illness, which includes fever, cough, cold, sore throat, headache, generalised body pain, loss of taste and smell sensations. It ranges in severity causing Pneumonia – all caused by the virus known as Corona virus. The pandemic did indeed cause a havoc as it was declared as a Public Health Emergency. It not only had an impact on lives of people but had a worldwide impact on varied sections of society, not limited only to healthcare but also the economy, psychology, travel and tourism, to just name a few. There was even a certain stigma associated with contracting the virus and having to stay in complete Home Isolation from the World. It not only had pronounced effects on the physical well-being of an individual, but also on one's mental make-up. It has been a constant learning curve across different walks of life, that placed Hand Hygiene, Mask Wearing and Social Distancing at the epicentre of the prevention of such a Communicable Disease. This article is a reflection of my experience, battling with Corona Virus. – a deadly Pandemic of the 21<sup>st</sup> Century.

**Keywords:** SARS, Covid19, Viral, Health

**Comment [K1]:** Mesh Terms

#### **Introduction:**

Covid-19 is a similar to a normal infection that causes a contamination in one's nose, sinuses, or upper throat. Most of the Covids are not risky<sup>1</sup>. Coronaviruses are encapsulated positive sense RNA<sup>2</sup> infections going from about 62 nm to 140 nm in measurement with spike-like projections on the surface giving it a some-what crown like appearance under an electron magnifying lens; consequently the name Covid. Four Covids, likely to be specified as HKU1, NL63, 229E and OC43<sup>3</sup> have been available for use in people, and for the most part cause gentle respiratory sickness.

Coronavirus is a viral disease brought about by SARS-CoV-2 that can stimulate what some specialists call as a respiratory/ lung disease. It can influence one's upper respiratory lobes which include sinuses, nose and throat, or lower respiratory lobes comprising the windpipe and lungs.

Covid 19 spreads a similar way other Covies do, primarily through individual to-individual contact also known as aerosol transmission. Contaminations vary – ranging from gentle to destructive. SARS-CoV-2 is one among the seven sorts of Covid, including those that cause extreme or severe illnesses like in the Middle East having - Middle East respiratory disorder (MERS) and the abrupt intense respiratory condition – known as Severe Acute Respiratory Syndrome. The other Covies - causing the vast majority of the colds that influence us all round the year however are anything but a genuine danger for in any probable case sound people.

In the mid 2020, after the flare up in December 2019 seen in China, the World Health Organization recognized SARS-CoV-2 as another kind of Covid.<sup>4</sup> The episode immediately spread around the planet - Earth. The Covid illness (COVID-19) – a rampant epidemic that turned into a pandemic, had begun in the city of Wuhan, China, it immediately spread to different nations, with a vast number of cases having been accounted for around the world. As of May 8th, 2020, 56,342 positive cases<sup>5</sup> have been accounted for in the Indian sub-continent. India, with a population of about or even more than 1.34 billion—the second biggest populace on the planet—will experience issues in controlling the transmission of extreme intense respiratory disorder Covid 19 amongst its diverse population. Numerous systems that proved to of exceptionally importance to deal with the current pandemic; these include various computational demonstrating, factual devices, and quantitative examinations to curb the multitude of spread, just as the fast improvement of another treatment.

There have been around at least two occasions in the previous two decades wherein a hybrid of creatures that is - beta-corona infections to people, which has brought about extreme illnesses. The primary incidence of such an infection was in 2002–2003 when another Covid of the  $\beta$  genera and origination from the birthplace of bats moved over to people, through the middle man host of palm civet of felines seen in the Guangdong area of China. This infection, assumed as serious intense respiratory disorder.

Covid influenced 8422 individuals for the most part in China and Hong Kong. It caused 916 passings (death rate 11%) prior to being contained. Just about a decade after the incidence in 2012, the Middle East respiratory condition Covid (MERS-CoV), additional to bat inception, arose in Saudi Arabia with dromedary camels as the moderate host and influenced 2494 individuals and caused 858 passings (casualty rate being 34%)<sup>6</sup>.

### **Body:**

I vividly remember the initial days when Covid 19 was perceived as nothing but a rumour. A rumour that the Virus which had originated in China was out to get the World, a rumour that it was so deadly and infectious that it would befall doom over more than half of mankind.

I was then posted in a Primary Health Care located in Deoli, as a Medical Intern. My Internship had just begun, as a part of my MBBS curriculum in Datta Meghe Institute of Medical Sciences. I was to undergo a compulsory rotation in the rural areas for a period of 2 months. The Medical Officer and I would often ponder and quibble about the seriousness of this disease, as we catered to the needs of our rural patients, who often came in for mundane Upper Respiratory

Infection Symptoms. We mostly laughed it off and brushed off even the merest possibility of the Virus affecting a country like India, where we so frequently examined and treated patients without even masks or gloves. It was later, as the days passed that we realised that this wasn't a rumour, it was in fact true, whatever we had heard about it – a deadly communicable disease with an infectious rate of about 2.5<sup>7</sup>. All the news channels and newspapers worldwide would only just carry one news, that of the Severe Acute Respiratory Syndrome – Covid 19. It had become a rage just within the few months of being the newly discovered endemic in Wuhan.

The first case in India was reported on January 27<sup>th</sup>, 2020. In Kerala, a female patient in the second decade of her life, came to the Emergency Department of a General Hospital situated in Thrissur with one day history of cough without expectoration and sore throat<sup>8</sup>. The lady divulged that she had in fact returned to Kerala from Wuhan, China and that's where she might have contracted the disease. It was further discovered that she had probably been asymptomatic for at least a period of three days after her return from Wuhan. She was then shifted to the isolation room and an oropharyngeal swab was taken, which was promptly sent by the Rapid Response team to the National Institute of Virology situated in Pune. It was on January 30<sup>th</sup>, when she was detected as the first Covid 19 positive case in India.

Since then, our Hospital authorities and the Community Medicine Department in Jawaharlal Nehru Medical College, were immediately put on guard and alerted regarding the possible spread of such a Virus. We were intimated regarding the possible outbreak of the disease and were cautioned to be vigilant.

On January 30<sup>th</sup> 2020, SARS CoV 2 was declared to be a Public Health Emergency, deemed to be of International Concern by World Health Organisation.<sup>9</sup> A Temporary set of Recommendations were then issued. It was urged that every citizen and health care provider were to abide by the set of guidelines which would later help to curb the effects of the Pandemic.

The new Guidelines were immediately communicated to us in order to prevent ourselves from further exposure to possible patients coming in to the Primary Health care Centres to get themselves evaluated and treated.

It was seen that there was a linear increase in the rise of cases. Community spread was rampant in all parts of India. As the daily Newspapers were delivered, we got our daily dose of reality check, as there was a steep incline in the incidence rates of Covid 19. It was then that most of us faced challenges even to carry out our day to day activities. As me and my friends were tossed from one Primary Health Centre to other Community Health Centres across Wardha, it proved to be difficult to even procure simple surgical masks. The shortage of Personal Protective Equipment kits World over, was really seeming to affect us. There was a time where, a couple of us from the hospitals would go Chemist to Chemist, just to buy a set of masks – to our disappointment, we were turned away, either due to the unavailability or due to the ridiculously high price quoted for a single mask. To this think of being a Primary Health Caregiver and to not having even the basic protective equipment due to the gross unavailability, proved to be very daunting!

Soon, Handwashing, using of facemasks and maintaining Social distance of at least 6 feet, became the epicentre of the New Guidelines provided to us by the World Health Organisation, in a desperate attempt to curb the spread of the Virus. We underwent rigorous training by our Medical College Officials in order to help identify early signs and symptoms of Covid 19 in the rural population that we were given charge of. We were even trained to perform numerous Community Outreach programmes to help educate the lower strata of the society regarding effects of Covid 19 and help them identify symptoms of Upper Respiratory Infections such as fever, cough, cold, sore throat, loss of taste or loss of smell sensations and so forth. We communicated to them the hospital protocols of such an infection and how it is vital to be screened and referred to a Tertiary Care Hospital, at the earliest. We stressed on the importance of Hand washing techniques as we taught them the seven step Hand Hygiene technique underlined by the World Health Organisation, Geneva and The Indian Council Of Medical Research, New Delhi. We also educated them on the vitality of wearing a mask as even an individual without any signs or symptoms of Covid 19, may be an asymptomatic carrier and thus, by wearing a mask would help prevent the spread of the disease as it transmitted via aerosols through coughing or sneezing in public.

However, more to our dismay, despite the detailed Outreach programmes, patients would come in thronging crowds to our Primary Health Care centres to seek medical advice, flouting the infectious disease control guidelines. Patients, despite having Influenza like illness with possible bilateral crepitations and rhonchi would refuse to be referred to a Tertiary or any other Higher Centre for their treatment. On probing, we found that most of the patients would dismiss the issue as they'd believe that it would not affect them, some would not want to be referred as they wouldn't be able to plonk a hefty sum of money for treatment. While some, would just get agitated with the waiting period to get a swab done and have its results back, which would typically take a week's time as initially all the swabs would have had to be sent to the National Institute of Virology, situated in Pune, Maharashtra.

It was 23<sup>rd</sup> March 2021, when I was travelling from my Medical College – Datta Meghe Institute Of Medical Sciences, to my hometown, Bangalore, to complete some paperwork. Around then, Tamil Nadu, Delhi and Maharashtra were among the States with the highest case load for Covid 19. With great difficulty, I had managed to travel homeward and landed in Bangalore airport on 24<sup>th</sup> March 2021. However, despite the rising cases, there weren't any strict restrictions posed on domestic flight travellers, apart from maintaining social distance and wearing a well fitted mask. Groggily got home and just hit the bed. The following morning, all my family members had gathered in front of the television to hear and see Mr. Narendra Modi, The Prime Minister Of India, address the Indian population to reassure its citizens regarding the efforts undertaken by the Indian Government to combat this deadly Pandemic. It was the Day of Janata Curfew, when he was going announce the set few guidelines for the months that would follow. Dressed in a sky blue jacket and a white kurta, he first urged all Indian Citizens to come out of their homes and balconies of their apartments and raise their hands to applaud the self-less contributions made by the Frontline Workers – Healthcare Professionals, Police force, Military, Para-military and Sanitary workers, towards their constant attempts to eradicate the virus and to help in smooth functioning of life even in such difficult times. This act of kindness was then followed by an act of surprise when our honourable Prime Minister, sprang out a placard which

**Comment [K2]:** 2020 year

stated: “Co – Ro – Na: Koi – Road Par – Na Nikale.” Hence, marking that day to be the commencement of a 3 month odd Nation-wide lockdown, to the disbelief of most. Most people stranded and left to go nowhere and as was I. The lockdown however turned more perilous on me when the clock kept ticking and I was unable to go back to my parent Medical College to pursue my Internship. Luckily, on April 7<sup>th</sup> 2020, the Medical Council Of India put out a notice urging adequately qualified Medical Interns to join any Medical University affiliated Hospital as a House surgeon for the continuation of Internship without requiring a No Objection Certificate from the University<sup>10</sup>. Hence, without much ado, I decided to join as a Medical Intern in one of the prestigious College and Hospitals in Bangalore. At the time, that particular hospital was one of the only Hospitals in Bangalore, Karnataka which was admitting Covid and Non – Covid patients on a daily basis. Adding to my misfortune, the hospital was severely short staffed, as a result of which, Interns had to bear the brunt of frequent Covid as well as Non – Covid On –call duties. We were deployed in all parts of the city/state in order to screen and test possible Covid patients.

The outcome of our swabbing – Covid duties, made me realise how juxtaposed the two States – Maharashtra and Karnataka are in terms of the Covid 19 situation. Most of the patients turning positive in Bangalore were asymptomatic, where at a time it was recorded to have 60% asymptomatic cases.

Looking at the trend of spread, change in modalities of health care, active participation of the Indian Government and Guidelines laid out by the World Health Organisation, Indian Council Of Medical Research and Centres of Disease Control, have come such a long way in just about a year.

### **Discussion:**

With the incline of the pandemic some strata of the society were severely inconvenienced as in the case of labourers who were left stranded, fending for themselves as there was a ban on all public and private transports.<sup>11</sup>

People living as Paying Guests were ousted from their respective homestays. Daily wagers suffered as their source of income greatly reduced.

The healthcare set ups also suffered a set up in terms of many TB patients who went undiagnosed and did not receive their Directly Observed Short Course treatment properly, in accordance with RNTCP – Revised National TB Control Programme<sup>12</sup>.

Most healthcare professionals as well suffered with pay – cuts despite relentlessly working in difficult times. Interns like me, who were forced to start working without being allowed back to their parent college, were inconvenienced as we lost out on the stipulated stipend that we would have otherwise received.

Despite the increased workload and pay reductions, I personally found that Covid 19 proved to be a great learning experience. As the hospital was short staff, Medical Interns were given more opportunities to get Hands-On experience, rather than just mundane paper/clerical work.

As a trainee – I acquired a number of skills ranging from, being the Frontline Worker, intubating Covid positive patients, despite aerosol production, swabbing a number of patients, conducting deliveries in the Covid labour rooms independently, being first assist on Surgical emergency cases

such as Appendicitis, managing patients independently in the Covid Medical Intensive Care Units, prescribing medications keeping in mind the severity of the Covid cases – Mild, Moderate or Severe, to even preparing Death summaries and attending Death Audits. It was a learning experience to be working in a pandemic which is a rarity.

The Health Ministry and Family Welfare of India, New Delhi has also shed significant light over the issue at hand, which is the new episodes of the disease and made fundamental, strategic decisions to control the spread of COVID-19, at the right time and hence deserves recommendation. The focal and state governments are taking a number of measures and planning a few wartime conventions to accomplish this objective, to provide a safe and secure environment for its citizens.

The Indian government executed a strict 55-days lockdown throughout the country that began on March 25th, 2020, which aimed at lessening the transmission of the infection. It did indeed give time for the healthcare centres to regroup and come up with a detailed and structured way to handle the pandemic crisis. However, the episode may not be separated from the fact that it closely connected to the economy of the country, as it has drastically hindered mechanical areas since individuals overall are as of now mindful about taking part in business in the influenced part of the country.

The pandemic, however grave and disastrous, there may be still a silver lining as most of us so often miss to acknowledgment. In view of the efforts taken by our Government, India emerged to be the World's Second Largest manufacturer of Personal Protective Equipment<sup>13</sup>.

The complete as well as the partial Lockdown, levied by the Central and State Governments enable the society and environment as a whole to recuperate from some man made atrocities such as noise and air pollution.<sup>14-16</sup> The quality of air had markedly improved and due to the ban on moving vehicles, there were even a few citing of animals leaving their natural habitat and coming out on the roads. A number of studies reflected on impact of Covid-19 on different aspects of society<sup>17-20</sup>. Studies on ocular<sup>21</sup> and psychological manifestations<sup>22</sup> of Covid were also reported. With the efforts of the various bodies associated with Healthcare, Research and the Indian Government,<sup>23-24</sup> finally the vaccine against this communicable disease has been launched and is shortly expected to be made available to every individual as a part of the National Vaccination Drive. Hence, one can hope that the infection can be then tamed and revert back to the pre- Covid phase.<sup>25-26</sup>

### **Conclusion:**

This Pandemic has just reiterated the importance of maintaining good Hand hygiene practices. It is disheartening to learn that it takes a disease of this magnitude of infectivity to enforce basic day to day hygiene methods. Hence, this article aims to urge people to bear in mind the lessons that Covid 19 has taught us. Remembering to practice correct mask wearing habits, masks that fit well and are most importantly clean and do not have any sort of respirators. Maintaining Social Distancing is of utmost importance, irrespective of the time, place or person. As the lockdown has now been lifted, it is more important now than ever to follow proper

guidelines and refrain from flouting the laws. The possibility of a second wave or another pandemic must always be borne in mind and hence, act in accordance. Prevention is always better than cure.

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Comment [K3]: Vancouver style

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UNDER PEER REVIEW